PATENT ABSTRACTS OF JAPAN

(11)Publication number:

10-076264

(43) Date of publication of application: 24.03.1998

(51)Int.Cl.

C02F 1/44

B01D 63/06 B01D 65/02

(21)Application number : 08-234586

(71)Applicant: KUBOTA CORP

(22)Date of filing:

05.09.1996

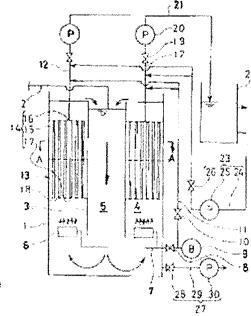
(72)Inventor: HORII YASUO

(54) SEWAGE TREATMENT APPARATUS USING IMMERSION TYPE MEMBRANE SEPARATOR

(57) Abstract:

PROBLEM TO BE SOLVED: To enable operation under a small aeration strength, to suppress foaming in a tank to enhance the concn. of MLSS and to achieve cost reduction.

SOLUTION: A sewage treatment apparatus is constituted by forming a circulating system consisting of ascending and descending passages 4, 5 to an immersion tank 1 and arranging an air diffuser 6 to the lower part of the ascending passage 4 and arranging an immersion type membrane separator 13 on the way of the ascending passage 4. In the immersion type membrane separator 13, a plurality of tubular membrane elements 15 are arranged along the ascending passage 4 in an up and down direction and water passing parts



18 permitting ascending streams to pass are formed to the header 16 allowing the respective membrane elements 15 to communicate with each other.